PTO/SB/33 (07-05)
Approved for use through xx/xx/200x. OMB 0651-00xx
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)	
MAT-8791US	
Application Number: 10/563,509	Filed: January 5, 2006
First Named Inventor: Tomohiro URYU et al.	
Art Unit: 2629	Examiner: Randal L. Willis

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.
See 37 CFR 3.7.1 Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒ attorney or agent of record.
Registration number **34,515**

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

Signature

Lawrence E. Ashery
Typed or printed name

(610) 407-0700
Telephone number

November 19, 2010
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted

The issue here is that Applicants claim an image processing device that divides data into a plurality of reduced size data having a common size. In contrast, Miura's static control data has to be divided into a plurality of reduced size data based on the type of data (not based on a common size), otherwise the transmissions will be incomplete.

Applicants believe the Examiner has incorrectly combined the prior art references because Miura's static control data has to be divided based on the type of data (not based on a common size of the vertical blanking), otherwise the complexity of the transmitter and receiver will be increased. If Miura's static control data is broken into common size data, then how would it be reconstructed at the receiver? For example, if the video control data, light source control data and display mode control data are broken up based on a common size, then partial pieces of the data will be transmitted during different frames. The partial pieces must then be reconstructed at the receiver.

Applicants' claims have been rejected by a combination of Miura (US 2004/0263496) in view of Fumoto (US 5,200,738) and further in view of "What is Asynchronous Transfer Mode" by Black. Specifically, Miura's system which teaches static control data broken up into reduced size data is combined with Fumoto and Fumoto and Black's systems which suggests transmitting common size data over a vertical blanking period between frames. Specifically, in the Final Office Action, the Examiner states that it would be obvious to modify Miura's system to divide the static control data into common sizes and transmit them over the vertical blanking period.

Miura's system, as shown in Fig. 4B, includes static control data. Specifically, the static control data includes different types of data (i.e., video control data 15A, light control source data 15B and display mode control data 15C). As shown in Miura's Fig. 5B, the static control data is broken up (by type) and transmitted in successive frames (i.e., the video control data B0, B1 and B2 are transmitted during the first frame, light source control data B3, B4 and B5 are transmitted during the second frame and display mode control data B6 and B7 are transmitted during the third frame).

As shown in Fig. 3 and described in col. 4, Fumoto suggests transmitting data over a vertical blanking period. Specifically, col. 4 of Fumoto suggests changing the contents of 102B and control registers 105 during a vertical blanking period.

Black suggests an asynchronous transfer mode (ATM) where data is transmitted. Specifically, Black suggests that encoding data in asynchronous transfer mode is consistent because each cell is 53 bytes in length (the cells have a common data length).

Applicants' claim 1 recites an image processing device that transmits data over a vertical blanking period. Specifically, data is divided into a plurality of reduced size data which have a common size corresponding to the length of the vertical blanking time period.

As shown in Applicants' Figs. 6A-6D, data d2 is broken up into a plurality of reduced size data d2-A and d2-B which have a common size corresponding to the vertical blanking time period. Another example is at least shown in Figs. 7A-7E where the data d2 is broken up into reduced size data d2-A, d2-B, d2-C and d2-D which all have a common size. By dividing the data into reduced size data having a common size (e.g. common number of bytes), the entire vertical blanking time period (which has a common size between each frame) may be utilized more efficiently. See page 10 of Applicants' specification for further support.

On pages 4 and 5 of the Final Office Action, the Examiner states that it would be obvious to modify Miura's system (based on Fumoto and Black) to divide the static control data into data blocks having a common size. One of ordinary skill in the art, however, would not modify Miura's system to divide the static control data into common size data blocks, because Miura's static control data would have to be divided based on the type (i.e. based on whether it is video control, light source, or display mode data).

For example, as shown in Miura's Fig. 4B, video control data, light source control data and display mode control data do not have a common size. Specifically, the video control data ([B0,B1,B2]) and light source control data ([B3,B4,B5]) are

three blocks in size, whereas the display mode control data ([B6,B7,]) is only two blocks in size.

It is important in Miura's system to break the static control data based on the type of data so that the data transmissions are complete (i.e., all of the video control data, light source control data or display mode control data is sent in a single frame and are not broken up over multiple frames). This is at least shown in Miura's Fig. 5B where the three different types of data are transmitted in three different frames regardless of their size.

In one example, if the static control data ([B0, B1, B2]) is divided into blocks having a common size (e.g., size 2), then blocks B0 and B1 will be sent in the first frame and blocks B2 and B3 will be sent in the second frame. Thus, the video control data will only be partially sent in the first frame (i.e., B0 and B1 will be in the first frame, but B2 will not be transmitted until the second frame).

In another example, if the static control data is broken into blocks having size a common size (e.g. size 3), then the video control data and light source control data will be sent as complete data, however, display mode control data will not consume an entire vertical blanking period (i.e., the vertical blanking period will have capacity for three blocks, but the display mode control data only has two blocks B6 and B7, thereby wasting transmission space).

Thus, if the data is divided into too small of a size, then incomplete data will be transmitted and then have to be reconstructed by the receiver, thereby greatly increasing the complexity of the receiver. If the blocks are divided into large data blocks, then some of the transmission space in the vertical blanking period may be wasted thereby greatly reducing the efficiency of the system.

Since Miura teaches a system for dividing static control data based on the type of data, one of ordinary skill in the art would not modify Miura to divide the data based on a common size (modifying Miura to divide data with a common size would increase the complexity while decreasing the efficiency of the receiver). Neither Miura, Fumoto, Black nor their combination suggests the features in Applicants'

independent claims. Thus, the claims are patentable over the art of record for at least the reasons set forth above.

FP_1099912